



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,662	07/31/2003	Jean-Pierre Rigal	P23919	9495

7055 7590 02/17/2005

GREENBLUM & BERNSTEIN, P.L.C.
1950 ROLAND CLARKE PLACE
RESTON, VA 20191

EXAMINER

BOTTORFF, CHRISTOPHER

ART UNIT	PAPER NUMBER
----------	--------------

3618

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,662	Applicant(s) RIGAL ET AL.	
	Examiner Christopher Bottorff	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on October 31, 2003 was considered by the examiner.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 requires the movement of the latch to be controlled by a source of pneumatic energy with the exception of any other energy. However, movement of the latch disclosed by Applicants is controlled by numerous sources of energy in addition to

Art Unit: 3618

pneumatic energy. Paragraph 0029 of the specification indicates that movement of the latch to the return position is controlled by torsional spring 30. Also, paragraph 0036 of the specification indicates that movement of the latch is initially controlled by electrical energy sent to solenoid valve 40 to cause the movement of the latch. Thus, the disclosure fails to explain how the motion of the latch is controlled by pneumatic energy alone. For the purposes of examination, this limitation is interpreted as requiring at least pneumatic energy control the movement of the latch.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4 and 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The expression "cylinder/jack" in line 2 of claim 4 is indefinite since the claim does not establish the actual structure of the component that tilts the latch. As currently presented in claim 4, the component could have either the structure of a cylinder, a jack or both. For the purposes of examination, this limitation is interpreted as defining either an air cylinder or an air jack.

Claim 8 recites the limitations "the plate" and "the bending zone" in lines 1 and 2. Claim 9 recites the limitation "the solenoid valve" in line 2. There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Cornu US 4,121,854.

Cornu discloses an assembly comprising a release block having at least one jaw 2. See Figure 1. The jaw 2 is mounted for movement between a closed position and an open position. See Figures 1 and 4. A movable latch 9 and a source of pneumatic energy 22 controlling movement of the latch 9 are also provided. See Figure 1 and column 3, lines 57-59.

The movable latch 9 is tilted by an air jack 24, 25 in a position for allowing opening of the jaw 2. See column 3, lines 50-52. The latch 9 is a rocker movable about an axle 10 with an upper arm 11 oriented in a position for closing the jaw 2, so that the force component passes through the axle 10 for rotating the rocker. See Figure 1. The latch 9 is also elastically returned to the position for closing the jaw 2 by a spring 6. See Figure 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3618

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornu US 4,121,854 in view of Martin US 6,659,494.

The pneumatic energy of Cornu is delivered by a pyrotechnic charge rather than by a solenoid valve connected to a reservoir of pressurized gas with a pressure regulator positioned at an outlet of the gas reservoir. However, Martin teaches the desirability of delivering pneumatic energy to an assembly by a solenoid valve 1305 connected to a reservoir of pressurized gas 18 with a pressure regulator 1307 positioned at an outlet of the gas reservoir 18. See Figure 13; column 5, lines 9-10 and 18-20; and column 6, lines 40-42. From the teachings of Martin, delivering the pneumatic energy of Cornu by a solenoid valve connected to a reservoir of pressurized gas with a pressure regulator positioned at an outlet of the gas reservoir, rather than by a pyrotechnic charge, would have been obvious to one of ordinary skill in the art at the time the invention was made. This would provide an effective system for storing and delivering high pressure gas and would eliminate the hazards associated with the combustion of a pyrotechnic device.

Claims 7 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Cornu US 4,121,854 in view of Salomon US 4,383,702.

Cornu does not disclose that the release block is mounted on a plate having a bending zone in which stress gauges are positioned or that a support is positioned

under the plate. However Salomon teaches the desirability of mounting a release block 8 on a plate 1 having a bending zone in which stress gauges 11-14, 21-24, and 31-34 are positioned. See Figures 1 and 2; column 2, lines 61-68; and column 3, lines 1-50. A processing circuit 91 connects the stress gauges to a locking member 9a for opening a jaw 8. See Figure 3; column 3, lines 66-68; and column 4, lines 1-7. Salomon further teaches the desirability of positioning a support plate 10 under the plate. See Figures 1 and 2 and column 4, lines 22-23. From the teachings of Salomon, mounting the release block of Cornu on a plate having a bending zone in which stress gauges are positioned would have been obvious to one of ordinary skill in the art at the time the invention was made. This would allow for the determination of stresses produced at the time of skiing for determining an appropriate time to release a boot from the release block. From the further teachings of Salomon, positioning a support plate under the plate of Cornu would have been obvious to one of ordinary skill in the art at the time the invention was made. This would aid in fixing the plate to the ski and would have the effect of raising the bending zone from the ski.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornu US 4,121,854 in view of Salomon US 4,383,702 as applied to claim 7 above, and further in view of Martin US 6,659,494.

The pneumatic energy of Cornu is delivered by a pyrotechnic charge rather than by a solenoid valve 1305 connected to a reservoir of pressurized gas 18. See Figure 13; column 5, lines 9-10, and 18-20. However, Martin teaches the desirability of

Art Unit: 3618

delivering pneumatic energy to an assembly by a solenoid valve connected to a reservoir of pressurized gas. From the teachings of Martin, delivering the pneumatic energy of Cornu by a solenoid valve connected to a reservoir of pressurized gas, rather than by a pyrotechnic charge, would have been obvious to one of ordinary skill in the art at the time the invention was made. This would provide an effective system for storing and delivering high pressure gas and would eliminate the hazards associated with the combustion of a pyrotechnic device.

Conclusion

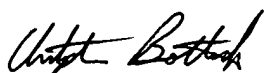
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Spitaler et al., Dimier et al., Stepanek et al., and Martin et al. US 6,769,711 disclose assemblies including fluid energy sources. Salomon US 4,280,714 and Frohwein disclose assemblies utilizing electrical circuits for control. Wittmann et al., Goud, and Szafranski disclose assemblies including spring energy sources.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (703) 308-2183. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

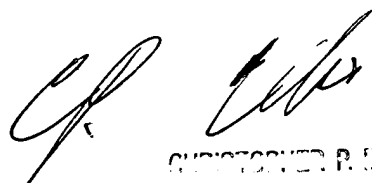
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3618

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher Bottorff



CHRISTOPHER R. ELLIS
PATENT ATTORNEY
TELEPHONE 800 333 3333